BOBBY JINDAL
GOVERNOR

HAROLD LEGGETT, PH.D.
SECRETARY

State of Louisiana

DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

May 16, 2008

RE: Notification of final permit action
Basis for Decision and response to significant comments regarding Murphy Oil U.S.A., Inc., Meraux Refinery, Agency Interest (AI) No. 1238, St. Bernard Parish

Dear Sir or Madam:

Thank you for your interest in the referenced matter. The Louisiana Department of Environmental Quality (LDEQ) has received and considered all public comments submitted regarding these permit actions. Please be advised that the actions were approved as follows:

Air	Title V Permit	No. 2500-00001-V3	Issued	05/08/2008

The Basis for Decision and the public comment response summary are attached; they address significant public comments regarding this permit action. The permit and related documents are available for review at the LDEQ Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, Louisiana. Viewing hours are from 8:00 a.m. to 4:30 p.m. Monday – Friday (except holidays).

The documents are also available for review by accessing LDEQ's Electronic Document Management System (EDMS), the LDEQ's electronic repository of official records that have been created or received by LDEQ. Persons may search and retrieve documents stored in the EDMS via the LDEQ's web application at http://edms.deq.louisiana.gov/app/doc/querydef.aspx).

If you would like to obtain copies of these documents, you may request them from LDEQ Records Management at the North 5th Street location above, write Records Management at P.O. Box 4303, Baton Rouge, LA 70821-4303, or call (225) 219-3168. Your request will be processed pursuant to LDEQ procedures for public record requests, LAC 33:I.2301, *et seq.*, and a copy fee will be charged.

Pursuant to La. R.S. 30:2050.21, an aggrieved person may appeal devolutively a final permit action only to the Nineteenth Judicial District Court for the parish of East Baton Rouge. A petition for review must be filed in the district court within thirty days after notice of the action has been given.

If you have any questions, please contact Dr. Marta Vasquez of the Office of Environmental Services, Air Permits Division, at (225) 219-3130.

Sincerely,

Bryan D. Johnston

Bryan Johnston, Administrator
Air Permits Division

Attachments

LOUISIANA DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF ENVIRONMENTAL SERVICES

RESPONSE TO PUBLIC COMMENTS

PART 70 AIR OPERATING PERMIT No. 2500-00001-V3
AGENCY INTEREST (AI) NUMBER 1238
MURPHY OIL USA INC., MERAUX REFINERY
MERAUX, ST. BERNARD PARISH, LOUISIANA

A notice requesting public comment and informing the public of the time and location of the public hearing was published in *The Advocate*, Baton Rouge, Louisiana and in the *St. Bernard Voice* on January 4, 2008. The public notice was also mailed to persons included in the LDEQ mailing list on January 3, 2008. The public notice was also posted on the LDEQ website on January 3, 2008. On January 3, 2008 the public comment period was extended to January 11, 2008 because of a schedule conflict. The public hearing was held at the Big Tent located at 8201 West 17 Judge Perez Drive, Chalmette, Louisiana 70043 on Thursday February 9, 2008, beginning at 6:00 p.m.

In addition, a public information session was conducted by representatives from Murphy Oil, USA, Inc. (MOUSA) on November 30, 2007, at the facility, 2500 East St. Bernard Hwy, Meraux, Louisiana.

The LDEQ received written comments on the proposed permit and the Environmental Assessment Statement (EAS) during the comment period, which ended Monday February 11, 2008.

This document responds to pertinent statements (questions and/or comments) received regarding the impact of emissions on air quality. The public comments, together with the Office of Environmental Services, Air Permit Division's responses, relevant to the Part 70 Title V Air Operating Permit for Meraux Refinery, Meraux, St. Bernard Parish, Louisiana follows.

COMMENT No. 1
The proposed permit is an expansion of the refinery and it would result in tanks being located closer to residential properties.

RESPONSE TO COMMENT No. 1
The proposed permit is not an expansion of the refinery. MOUSA is replacing four (4) tanks at their original locations, within the same "footprint" as the tanks being replaced. Further, two of the tanks (300-4 and 300-6) will be of smaller capacity than those being replaced. The fifth tank, a sour water tank, is proposed to be relocated further away from existing property boundaries and will be of the same capacity as prior to reconstruction. Thus, the proposed permit will not expand MOUSA beyond its current fence line, nor will any of the tanks be located closer to the fence line than the tanks being replaced.

COMMENT No. 2
The proposed permit will result in an increase in emissions.

RESPONSE TO COMMENT No. 2
The proposed permit will result in no change in permitted emissions.

COMMENT No. 3
The proposed permit should require that MOUSA uses Best Available Control Technology (BACT) to control emissions.

RESPONSE TO COMMENT No. 3
While BACT is not required for projects in which there is no net change in emissions MOUSA will implement controls that will be equivalent to many recent BACT determinations.

The Meraux Refinery will employ MACT air pollution controls on all five (5) tanks to substantially minimize air emissions. These controls consist of floating roofs with primary and secondary seals, and sealed appurtenances. These MACT standards are specified in the proposed permit as enforceable limits per 40 CFR 63 Subpart CC. Additionally, the Meraux Refinery is equipped with advanced instrumentation to monitor and control the facility operations.

Four (4) of the five (5) tanks (all except 250-8) will also be subject to New Source Performance Standards (NSPS) under 40 CFR Part 60 Subpart Kb. Tank 250-8 is not subject to the NSPS controls because its vapor pressure is lower than the threshold of 3.5 KPa or 1.5 psia; however, it will also be equipped with an external floating roof.

COMMENT No. 4
The proposed permit should request that the tank dikes and containment structures meet strict standards.

RESPONSE TO COMMENT No. 4
Tanks 300-4, 300-6, 300-3A, and 250-8 will be rebuilt in the same location as the tanks they replace. These four (4) tanks will be surrounded with the same dikes that surrounded the former tanks. Tank T5 will be rebuilt so that it will have a greater dike area than the tank it replaces. This dike will have greater spill capacity, and thus be more protective. Before putting the new tanks in service, the Meraux Refinery must survey the dike walls to confirm continued compliance with the federal and state Spill Prevention, Control and Countermeasures (SPCC) rules. These new tanks will meet all SPCC rules including: secondary containment, dikes, and use of proper materials of construction. Equipment, piping, and accessories will be compatible with process fluids to prevent failure from corrosion, stress cracking or fatigue. Tank design and construction materials will meet stringent API standards. MOUSA currently meets all SPCC rules. Periodic inspections and preventive maintenance of all equipment must be performed to keep all process and safety systems in optimum operating condition.

COMMENT No. 5
The Environmental Assessment Statement (EAS) is inadequate, insufficient for the public and LDEQ to render a decision consistent with the constitutional duty as public trustee of the environment.

RESPONSE TO COMMENT No. 5
La R.S. 30:2018.A. requires submittal of an EAS with a permit application for "a new permit... that would authorize the treatment, storage, or disposal of hazardous wastes, the disposal of solid wastes, or the discharge of water pollutants or air emissions in sufficient quantity or concentration to constitute a major source." An EAS is also applicable if the increase in emissions at an existing facility would constitute a major modification.

Because the project is not a major modification, an EAS is not statutorily required for this tank upgrade/replacement project.

The proposed permit will result in no change in emissions as the total potential to emit (PTE) from the five (5) new tanks is exactly the same as the five (5) old tanks in Title V Permit 2500-00001-V2.

The project replacing the tanks is environmentally, socially, and economically beneficial. Three (3) of these tanks have already been de-commissioned and demolished with no problems. The same is true of traffic concerns, as the activities for de-commissioning have not caused traffic problems. Any short-term traffic problems that may be posed by future construction activities will be minimal and outweighed by the benefit of newer, more environmentally beneficial tanks.

COMMENT No. 6
The proposed permit does not reduce the possibility of releases, spills, accidents, that could impact the public safety.

RESPONSE TO COMMENT No. 6
The accidental release prevention program is mandated by Section 112(r) of the Clean Air Act Amendments and codified in 40 CFR 68 (see also LAC 33:III.Chapter 59). MOUSA, Meraux Refinery submitted a Risk Management Plan as required by the regulations.

In order to reduce the possibility of a release that could impact public safety, the components and systems of the plant involving chemicals are controlled through state-of-the-art technology in accordance with accepted good engineering practices and industrial trade association codes. Engineering practices include but are not limited to temperature, pressure, flow, metering, and level measurement.

MOUSA's employees are all trained on Occupational Safety and Health Administration (OSHA) Process Management regulations to respond quickly and effectively to process upsets in order to prevent accidental releases.

COMMENT No. 7
Possible spills/failure of the proposed tanks may result in water contamination not only around the facility but around the neighborhood thus impacting the public safety.

RESPONSE TO COMMENT No. 7
The Meraux Refinery operates a complex system of underground wastewater and storm water collection sewers. Wastewater and contaminated storm water are treated in the on-site Wastewater Treatment Plant.

Storm water runoff at the Meraux Refinery is managed to reduce contamination. A storm water pollution prevention plan has been implemented as a standard operating procedure. MOUSA uses best management practices to address and satisfy storm water management requirements, including good housekeeping, preventive maintenance, visual inspections, spill prevention, and recordkeeping and reporting. The facility is operating under a Louisiana Pollution Discharge Elimination System (LPDES) permit. LPDES permit LA0003646 issued on September 28, 2004 with an effective date of October 1, 2004 and expiration date of August 31, 2009 regulates the discharge of cooling water (Outfall 001) and wastewater (Outfall 002) to the Mississippi River. Permit LA0003646 also regulates discharges of storm water and hydrostatic test wastewater to Twenty Arpent Canal (outfalls 003, 004, 015-019) and storm water and hydrostatic test wastewater to Twenty Arpent Canal via the Meraux Canal (Outfall 020). MOUSA is required to conduct tests and/or monitoring according to the LPDES requirements to demonstrate compliance with the LPDES permit.

To meet permitting requirements, MOUSA will manage process wastewater and storm water from the proposed tanks in accordance with the LPDES permit. MOUSA must monitor discharge water quality in accordance with the LPDES permit. MOUSA must report the results of this monitoring to the LDEQ in accordance with the LPDES permit. Storm water discharged during construction activities must comply with all appropriate regulatory requirements.

Groundwater protection is an integrated part of the design for the proposed tanks. Equipment and procedures are in place to avoid any potential adverse impacts to groundwater. Process piping will be above grade to allow early detection and containment of any potential leaks or spills. Any spill or leak that could affect groundwater will be promptly repaired to prevent any adverse impact to groundwater.

COMMENT No. 8
Possible spills/failure of the proposed tanks may result in soil contamination not only around the facility but around the neighborhood.

RESPONSE TO COMMENT No. 8
The Meraux Refinery promptly remediates all spills per the Industrial RECAP Standard. The Meraux Refinery ensures that all waste shipped from the refinery for disposal goes only to suitable waste disposal sites that have regulatory approval and are capable of treating or disposing of the waste using approved methods. Waste is shipped only to sites on an approved list. These sites have passed a rigorous onsite inspection by MOUSA personnel familiar with waste disposal operations and regulations.

In addition, the potential impact on other environmental receptors, such as soils and vegetation, are expected to be negligible as a result of this proposed permit. No wetlands will be impacted by the proposed permit nor sensitive habitats, as the proposed permit is for a modification in an existing facility.

COMMENT No. 9
A commenter would like to know why these tanks are being replaced.

RESPONSE TO COMMENT No. 9
MOUSA has made a strategic decision to replace these tanks. Factors include tank age, results from inspection of the tanks steel thickness, settling, and damage from Hurricane Katrina.

COMMENT No. 10
All compliance issues must be addressed and documented before the construction of these tanks starts and thus before the approval of the proposed permit.

RESPONSE TO COMMENT No. 10
When considering the permit application, the LDEQ reviewed the existing operations and compliance record. The refinery is working with LDEQ to resolve issues raised in a Compliance Order dated April 9, 2006, and any other outstanding issues. A review of LDEQ's TEMPO database and EDMS indicates that all other enforcement actions LDEQ issued to the facility have been closed.

MOUSA must certify compliance with the terms and conditions of the permit for at least every 12-month period following the initial issuance. A copy of the compliance certification will also be made accessible to the EPA and the public. Additionally, MOUSA shall report, in writing, all instances of deviations, the probable cause of the deviations, and any corrective actions or preventative measures taken for the deviations for each emission unit covered by the proposed permit. Annual compliance certification and deviation reporting forms were developed and are maintained by the LDEQ Office of Compliance.

COMMENT No. 11
MOUSA's contingency plan before Hurricane Katrina needs changes so that the possibility of a major release of hazardous materials similar to the one that occurred during Hurricane Katrina is minimized and public safety is guarantee in case of floods, hurricanes, and other weather conditions.

RESPONSE TO COMMENT No. 11

MOUSA developed and will implement an emergency response program for the purpose of protecting public health and the environment. MOUSA's emergency response program includes the following elements;

1) An emergency response plan, maintained at the facility, containing the following elements:

    - Procedures for informing and interfacing with the public and local emergency response agencies about accidental releases, emergency planning, and emergency response.

    - Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures; and

    - Procedures and measures for emergency response after an accidental release of a regulated substance;

2) Procedures for the use of emergency response equipment, inspection, testing, and maintenance;

3) Training for all employees, who are expected to respond to a release, in relevant procedures and relevant aspects of the Incident Command System (ICS). Note: ICS training is required for employees who are required by their job description and positional responsibility to appropriately respond and interact with local emergency response agencies during a release; and

4) Procedures to review and update, as appropriate, the emergency response plan in order to reflect changes at the stationary source, and to ensure that employees are informed of changes.

MOUSA has an Emergency Response Plan, which includes the elements in the previous list. The Emergency Response Plan is coordinated with the Local Emergency Planning Committee. State and federal regulations have been promulgated specifically to address the accidental release and off-site consequence for toxic and/or flammable substances. These rules contain requirements for hazard assessment, release prevention, emergency response, and risk management with which the Meraux Refinery will comply. The design of the proposed tanks will be subject to a detailed Process Hazard Analysis to further reduce the likelihood of accidental airborne emissions.

MOUSA will avoid potential adverse effects, such as the release of hazardous chemicals, by designing system and training personnel to: (1) reduce the possibility of leakage of hazardous chemicals; (2) minimize the amount of leakage should leakage occur; (3) promptly inform the public and relevant agencies regarding possible off site

impacts as required by law; and (4) quickly respond to mitigate any adverse effects of the leaks.

COMMENT No. 12
The five replacement tanks should be in included in Murphy Oil's Title V Permit No. 2500-00001-V2, instead of a separate permit.

RESPONSE TO COMMENT No. 12
LDEQ agrees. The five new tanks will be authorized via a minor modification to Permit 2500-00001-V2.

COMMENT No. 13
The proposed Title V General Permit may affect the PSD analysis and the BACT determination that would otherwise need to be conducted in conjunction with the Title V Permit 2500-00001-V2.

RESPONSE TO COMMENT No. 13
Because the proposed Title V Permit 2500-00001-V3 will result in no change in VOC emissions, a new PSD analysis and BACT determination is not required. The total potential to emit (PTE) from the five (5) replacement tanks is exactly the same as the PTE from the five (5) old tanks in Title V Permit 2500-00001-V2. Potential emissions from the new tanks are less than 40 tons per year of VOC, therefore, a netting analysis was not required.

COMMENT No. 14
The proposed permit needs to include hydrogen sulfide and ammonia emissions and monitoring of these emissions. Also there is nothing in the permit to ensure compliance with the emission cap on all the sour water tanks for the refinery.

RESPONSE TO COMMENT No. 14
Title V Permit 2500-00001-V2 does not include hydrogen sulfide emissions from Tank 25-2 because the tank that is going to be replaced with the sour water storage tank T5. Any sulfide emissions associated with tank T5 would be negligible.

Likewise, Title V Permit 2500-00001-V2 does not include ammonia from Tank 25-2, the tank that is going to be replaced with the sour water storage tank T5.

COMMENT No. 15
The area where the replacement tanks will be located must be remediated of contaminated soil before the new tanks are built.

RESPONSE TO COMMENT No. 15
Within the tank dikes, the soil meets Risk Evaluation/Corrective Action program (RECAP) Soil Standards. With respect to off-site areas impacted by the tank spill resulting from Hurricane Katrina, MOUSA satisfied all appropriate LDEQ RECAP standards for remediation of residential and commercial property soils. These standards included "No Visible Oil" and health risk-based action levels. With daily oversight by USEPA, MOUSA followed the USEPA and LDEQ-approved Work Plan, as well as the Cooperative Agreement, to satisfy all sampling, remediation, and data

management requirements. Upon completion of all remedial activity at each individual property, the regulatory agencies verified the work in a final inspection. LDEQ maintains a complete public record showing that all impacted properties were properly remediated.

COMMENT No. 16
LDEQ must require sufficient monitoring to achieve compliance with emission limitations where period testing or instrumental or non-instrumental monitoring is not otherwise required as mandated in 40 CFR 70.6(a)(3)(i)(B).

RESPONSE TO COMMENT No. 16
Because tanks 300-4, 300-6, and 300-3A must comply with 40 CFR 63 Subpart CC and tank 250-8 will comply with 40 CFR 63.654(i)(1)(iv), EPA's "periodic monitoring rule" at 40 CFR 70.6(a)(3)(i)(B) does not apply. 40 CFR 70.6(a)(3)(i)(B) is applicable only when the "applicable requirement does not require periodic testing or instrumental or noninstrumental monitoring (which may consist of recordkeeping designed to serve as monitoring)."

COMMENT No. 17
The proposed permit should require that fence line monitoring be installed and community hotspot monitoring within the neighboring communities.

RESPONSE TO COMMENT No. 17
The LDEQ is committed to monitoring the air quality throughout the area. Chalmette is not an exception. There is an existing monitoring network, as discussed below.

The monitoring network designed for the Chalmette area is intended to verify ambient air concentrations while taking local emission sources into account. The Chalmette area has some of the newest and best air monitoring equipment available in the state.

LDEQ uses a large number of variables to select the locations for monitoring. Some of these variables include purpose, availability of land and resources, population, wind direction, and industrial activity. The LDEQ is held to certain standards by deferral rules that determine the minimum number of sites for a given area.

Additional information on the system is available at http://www.deq.louisiana.gov/portal/tabid/78/Default.aspx under Air Quality Assessment. In this instance, additional monitors are not warranted because permitted VOC emissions will not change.

COMMENT No. 18
The proposed permit must require that MOUSA plant a forested buffer zone between the residences and the refinery to shield bright lights and obscure the residents' view of the new tanks.

RESPONSE TO COMMENT No. 18
The LDEQ does not have a regulatory basis to impose such a requirement.

COMMENT No. 19
The right course of action within this tank farm would be to replace the tankage on the higher ground next to the river, South of St. Bernard Hwy; the land is less subject to tidal surge and sinking (settlement) and that would give our school's the option of transporting our children on Judge Perez Avenue only (the route furthest away from the dangers and emissions of the refinery and tank farm). MOUSA owns land which might prove the better alternative site within this industrial campus.

RESPONSE TO COMMENT No. 19
As explained in the EAS, the proposed project offers the refinery the opportunity to use existing infrastructure and resources to comply with the new standards. This use is a major factor when evaluating the project's efficient management of resources and its effect on the environment.

COMMENT No. 20
There will be fugitive emissions from the tanks and its ancillary equipment that will result in odors that constantly affect the neighborhood. The refinery must monitor these fugitive emissions.

RESPONSE TO COMMENT No. 20
The emissions from the five (5) new tanks will be the same as the emissions from the existing tanks. The tanks are not expected to cause odor problems and the project will be an improvement over the existing tanks. In addition, MOUSA complies with the Louisiana MACT requirements for monitoring and controlling fugitive emissions. The refinery has numerous components that are routinely monitored at specified intervals, with a portable organic vapor analyzer to determine leakage above a regulatory limit. The refinery uses a Fugitive Emissions Management System (FEMS) and specialized software to manage the fugitive emissions data. Equipment and unit operators also make routine rounds to check operation of machinery and preventive maintenance checks and utilize "Sight, Sound, and Smell Monitoring" to detect and correct conditions that may lead to a leak. The proposed emission limits for fugitives are based on actual refinery leak data, which results in emission limits significantly lower than the EPA-supplied AP-42 factors. The permit limits obligate the refinery to maintain a high level of performance.

COMMENT No. 21
The permit should require internal floating roofs with domed roofs for tanks 250-8 and T5 rather than external floating roofs.

RESPONSE TO COMMENT No. 21
Use of external floating roofs meets all applicable regulatory requirements.